

REMARKS

Claims 1-22 are pending in the present application. Claims 2-4, 6-13, 16, 18, 19 and 21 are withdrawn from consideration, and the remaining claims 1, 5, 14, 15, 17 and 20 are rejected. As a preliminary matter, Applicants cannot provide a copy of EP 0631623 because it is unavailable. However, the EP 0631623 reference is cumulative of WO 93/18143 as Applicant's Information Disclosure Statement indicates. Therefore, there is no need to submit the cumulative reference as WO 93/18143 has already been considered.

Objection to the Drawings

The Examiner objects to Figure 4 because BT20, BT474, MCF7, T47D, and MDA 468 are not mentioned in the portion of the specification describing the figure. Applicants herein amend the specification to include some description of these results as is apparent from the figure itself. The cell lines reported are also described in Figures 2 and 6 so no issue of new matter can arise by way of this express description.

Objection to the Specification

The Examiner objects to the specification because it contains hyperlinks that must be deleted and because the sequences are identified as "SEQ ID No." instead of "SEQ ID NO: #." Applicants herein make the appropriate corrections.

Objection to the Claims

The Examiner objects to the claims because claims 14, 15, 17, 20 and 21 allegedly encompass non-elected inventions. Applicants herein cancel the subject claims purely in the interest of advancing prosecution and securing rapid grant of a patent. As such, the objection is moot.

Rejection under 35 USC 112, second paragraph

The Examiner rejects the following claims as being unclear for the following reasons:

1. Claim 1 must recite a step of “comparing the level of SC6 polypeptide in a biological sample obtained from a subject with the level of SC6 polypeptide in a control;”
2. Claim 1 must recite a step such as “measuring an SC6 polypeptide results in diagnosis of an individual with a hypoxia related condition where an elevated level of said SC6 polypeptide occurs in a test sample relative to the level of said SC6 polypeptide in a normal sample;”
3. “Immunological and/or transporter activity” is unclear in claim 1;
4. “Hypoxia related conditions” is unclear in claims 1, 14 and 17, as it is not defined in the specification or recognized in the art;
5. “Angiogenesis and angiogenesis related disorders” is unclear in claims 14 and 17, as it is not defined in the specification or recognized in the art.

Applicants herein make the suggested amendments to claim 1 and cancel claims 14 and 17 as noted, supra, purely in the interest of advancing prosecution and securing rapid grant of a patent. As such, the rejection is moot.

Rejection under 35 USC 112, first paragraph

- A. Claims 1, 5, 11-13, 14-15, 17 and 20 are rejected under 35 USC 112, first paragraph as not being enabled.

Regarding scope of conditions

The Examiner says the claims are enabled only for methods of diagnosing cervical, breast, colon, renal, lung or uterine cancer and are not enabled for diagnosing hypoxia-related conditions, other cancers or angiogenesis or angiogenesis-related disorders. Purely in the

interest of advancing prosecution and securing rapid grant of a patent, Applicants specifically recite these particular conditions in the claims thereby overcoming the rejection. Applicants expressly reserve their right to pursue other claims embracing additional conditions in other United States patent applications whether such applications are continuations, continuations in part or independent.

Regarding scope of polypeptides

The Examiner says the claims are enabled only for methods of diagnosing based upon detecting over expression of SEQ ID NO: 1. The Examiner says an enabling disclosure for other polypeptides including mutants, variants, etc. would require one or more of the following:

1. Which portions of SEQ ID NO: 1 are critical to activity of the polypeptide;
2. Which modifications, substitutions, deletions or insertions could be made to result in polypeptides having about the same activity;
3. Some guidance on how to use the polypeptide variants of SEQ ID NO: 1 that are not disclosed as being differentially expressed.

Purely in the interest of advancing prosecution and securing rapid grant of a patent, Applicants specifically recite SEQ ID NO: 1 thereby overcoming the rejection. Applicants expressly reserve their right to pursue other claims embracing additional polypeptides in other United States patent applications whether such applications are continuations, continuations in part or independent.

- B. Claims 6-9 and 11-13 are rejected under 35 USC 112, first paragraph as not being properly described by the specification.

The Examiner further rejects the referenced claims because the specification allegedly fails to demonstrate possession of any polypeptides other than a polypeptide comprising SEQ ID

NO: 1 and a polypeptide consisting of SEQ ID NO: 1. The Examiner contends that under current United States requirements, at minimum some correlation of structure to function (beyond a mere desired function) or some description of the essential structural components required for the desired activity would be required.

Purely in the interest of advancing prosecution and securing rapid grant of a patent, Applicants specifically recite SEQ ID NO: 1 thereby overcoming the rejection. Applicants expressly reserve their right to pursue other claims embracing additional polypeptides in other United States patent applications whether such applications are continuations, continuations in part or independent.

Rejection under 35 USC 102

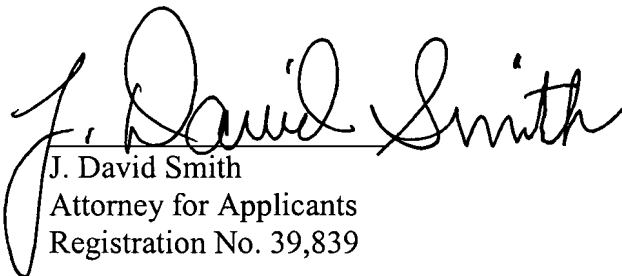
The Examiner rejects claims 1, 5, 14 and 17 under 35 USC 102(e) as allegedly anticipated by Sanjanwala *et al.*, WO 01/090148. According to the Examiner, Sanjanwala *et al.* teach a human neurotransmitter transporter designated NTT-4 (SEQ ID NO: 4) having an amino acid sequence 98.6% identical to SEQ ID NO: 1 of the instant application. Further, the Examiner says that Sanjanwala *et al.* teach that antibodies to the subject polypeptide may be used to diagnose hypoxia-related conditions.

Applicants note that the Examiner does not reject claims 15 or 20 directed to diagnosing the particular cancers. Therefore, Purely in the interest of advancing prosecution and securing rapid grant of a patent, Applicants specifically recite the particular cancers thereby overcoming the rejection. Applicants expressly reserve their right to pursue other claims embracing additional methods of diagnosis particularly those involving additional indications in other United States patent applications whether such applications are continuations, continuations in part or independent.

CONCLUSION

It is believed that all of the claims are patentable and early notification as such is earnestly solicited. If any issues may be resolved by way of telephone, the Examiner is invited to call the undersigned at the telephone number indicated below.

Respectfully submitted,



J. David Smith
Attorney for Applicants
Registration No. 39,839

KLAUBER & JACKSON
411 Hackensack Ave., 4th Floor
Hackensack, NJ 07601
(201) 487-5800